



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/064,398	07/10/2002	Donato Forlenza	BUR920010133US1	7444

24241 7590 06/30/2004  
IBM MICROELECTRONICS  
INTELLECTUAL PROPERTY LAW  
1000 RIVER STREET  
972 E  
ESSEX JUNCTION, VT 05452

EXAMINER

KERVEROS, JAMES C

ART UNIT PAPER NUMBER

2133

DATE MAILED: 06/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/064,398

Applicant(s)

FORLENZA ET AL.

Examiner

James C Kerveros

Art Unit

2133

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 27 August 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☒ Claim(s) 1-15 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>4</u> . | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. Claims 1-15 are pending and are hereby presented for examination.

#### ***Specification***

2. The abstract of the disclosure is objected to because the actual word count is 202, which exceeds the required word count. The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. Correction is required. See MPEP § 608.01(b).

#### ***Claim Objections***

3. Claims 1-15 are objected to because of the following informalities: Appropriate correction is required.

Claim 1, on line 2, in the preamble, a comma should be inserted “,” before “comprising”.

Claim 10, on line 2, in the preamble, a comma should be inserted “,” before “comprising”.

Claim 12, on line 2, in the preamble, a comma should be inserted “,” before “comprising”.

Claims 2-6, 8, 9, 11, 13 and 15, a comma “,” should be inserted before “wherein”.

***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "the functional failure" on line 5. There is insufficient antecedent basis for this limitation in the claim.

Claim 7 recites the limitations "the embedded circuit memories", and "the bootstrapping technique" on lines 7 and 13, respectively. There is insufficient antecedent basis for these limitations in the claim.

Claim 7, the phrases "may" and "other " recited on lines 7 and 8, respectively, renders the claim indefinite because it is unclear whether the limitation(s) following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to

Art Unit: 2133

whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, Claim 7, on line 2 in the preamble, recites the broad recitation "consisting of" and the claim also recites since "consisting of" which is the narrower statement of the range/limitation. The term "consisting of" does not properly further define the claimed invention, since "consisting of" defines a closed ended claim with narrow range, while the term "comprised of" on line 3, defines an open ended claim with broad range.

Claim 10 recites the limitations "the failed device", "the embedded circuit memories", and "the bootstrapping technique" on lines 4, 6 and 12, respectively. There is insufficient antecedent basis for these limitations in the claim.

Claim 10, the phrases "may" and "other " recited on lines 5 and 6, respectively, renders the claim indefinite because it is unclear whether the limitation(s) following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

Claim 12 recites the limitation "the functional failure" on line 5. There is insufficient antecedent basis for this limitation in the claim.

Claim 14 recites the limitations "the set of device", "the failing point", "said device state", and "the machine" on lines 5 and 6. There is insufficient antecedent basis for these limitations in the claim.

Art Unit: 2133

Claim 14 recites the limitation "applying a predetermined set of functional vectors have been applied" which renders the claim indefinite, because the terms "applying" and "have been applied" fail to properly define the time of the application of the "predetermined set of functional vectors", since there is time contradiction. Also, the limitation "allowing the set of device run at speed until the failing point is reached" fails to properly define the claimed invention, since it is not clear how one can obtain the device speed.

Claims 1 and 12 recite the limitation of determining the location "of and type of error" in the failing circuit, which renders the claim indefinite, because the term "of and type of error" fails to clearly define the step in determining the error type, since there is no previous test in defining error types corresponding to different failure conditions in the circuit.

Claims 8 and 9 recite the limitation "LSSD ". There is insufficient antecedent basis for this limitation in the claim.

Claim 11 recites the limitation "GSD". There is insufficient antecedent basis for this limitation in the claim.

Claim 13 recites the limitation "the functional failure". There is insufficient antecedent basis for this limitation in the claim.

Claim 15 recites the limitation "functional patterns ". There is insufficient antecedent basis for this limitation in the claim.

The Examiner did not apply prior art because the claims are generally indefinite.

Art Unit: 2133


**Conclusion**


5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James C Kerveros whose telephone number is (703) 305-1081. The examiner can normally be reached on 9:00 AM TO 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert Decady can be reached on (703) 305-9595. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Examiner's Fax: (703) 746-4461  
Email: [james.kerveros@uspto.gov](mailto:james.kerveros@uspto.gov)

Date: 28 June 2004  
Office Action: Non-Final Rejection

By:   
James C Kerveros  
Examiner  
Art Unit 2133

  
ALBERT DECADY  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100